



Authorization Basis Change Notice

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ABCN No.¹: ABCN-24590-01-00001 Rev No.: ~~0~~1

Proposed Change Title: ~~Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. A~~ Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. B

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

A. Describe the proposed design or administrative control (procedure, program, plan, or management process) change.

1. This revised Authorization Basis Change Notice provides the supplemental submittal requested in the Office of Safety Regulation (OSR) letter 01-OSR-0151.
2. Bechtel National, Inc. (BNI) has revised the Quality Assurance Manual, QAM-24590-01-00001 from revision level A to B to address the OSR concerns regarding the level of detail in describing how BNI would implement its Quality Assurance Program.
3. The QAM Requirements and Implementation Matrix, IM-24590-01-00001 has been revised from revision level A to B to reflect changes made to the QAM.
4. The Safety Requirements Document, BNFL-5193-SRD-01-02, Revision 4 and the Integrated Safety Management Plan, BNFL-5193-ISP-01, Revision 6, were not revised as part of this supplemental submittal.

~~1-5~~ **QAM - Quality Assurance Manual, QAM-24590-01-00001, Rev. AB**

- The proposed change implements the Bechtel National, Inc. *Quality Assurance Manual*, QAM-24590-01-00001, Rev. ~~AB~~ (Attachment 1).
- For information only, the *QAM Requirements and Implementation Matrix*, IM-24590-01-00001, Rev. ~~AB~~, provides a cross-walk between the contract requirements and the *Quality Assurance Manual*. (This is a non-AB document). (Attachment 2).
- Upon approval, the QAM will replace the *Quality Assurance Program* (document), BNFL-5193-QAP-01, Rev. 8.

~~2-6~~ **SRD - Safety Requirements Document, BNFL-5193-SRD-01-02, Rev. 4**

- Revise safety criteria 7.3-1 through 7.3-9 and 7.3-11 to remove reference to the ISMP sections 1.3.9, 1.3.11, 2.2, 3.15, 8.0, & 10.0 as implementing standards for Quality Assurance.
- Revise safety criteria to reference these implementing codes and standards – ASME NQA-1-1989, *Quality Assurance Program Requirements for Nuclear Facilities*; DOE/RW-0333P, *Quality Assurance Requirements Document*, Rev. 10; and Attachment 1, *Contractor Requirements Document* (CRD) of DOE Order 414.1A, (9-29-99).
- Add Attachment 1, *Contractor Requirements Document* (CRD) of DOE Order 414.1A, (9-29-99), as the implementing standard for safety criteria 7.3-12.
- Correct "Quality Assurance Program" to "Quality Assurance Manual", in the SRD, Appendix B, page B-10 (2 places).
- Safety criteria 7.3-10 will be addressed in a future ABCN.
- Copies of the specific SRD pages to be revised are provided as Attachment 5 to this document.

~~3-7~~ **ISMP – Integrated Safety Management Plan, BNFL-5193-ISP-01, Rev. 6**

- Changes to the ISMP are provided to ensure ISMP consistency in descriptions of Quality Assurance commitments compared with the QAM.
- Copies of the specific ISMP pages to be revised are provided as Attachment 7 to this document.

Acronyms describing standards used in this document:

NQA-1 ASME NQA-1-1989, *Quality Assurance Program Requirements for Nuclear Facilities*

¹ The ABCN document number is obtained from Project Document Control.

² The format, content, and level-of-detail associated with an acceptable safety evaluation is highly dependent on the nature of the proposed revision to the AB. Rather than establishing comprehensive guidance on appropriate evaluation format, content, and level-of-detail, the written evaluation should establish the most fundamental basis that can be applied to evaluating proposed revisions. There is a wide range of acceptable safety evaluation approaches. Also, the appropriate degree of rigor and documentation associated with the safety evaluation should be tailored to the specific AB revision. DOE (in RL/REG-97-13) does not indicate that an explicit and detailed case be made and documented showing that the fundamental criteria have been satisfied for all revisions to the authorization basis.



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ABCN No.¹: ABCN-24590-01-00001

Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

A. Describe the proposed design or administrative control (procedure, program, plan, or management process) change.

QARD DOE/RW-0333P, Quality Assurance Requirements Document, Revision 10

B. Describe the reason for the proposed change.

1. **QAM**

- The submittal of the QAM is required to meet Deliverable 2.7 as described in Contract No. DE-AC27-01RV14136, Table C.5-1.1 Deliverables.
- The QAM implements the contract requirements for ASME NQA-1-1989; the QARD, Revision 10; and DOE Order 414.1A. This is a change to the Quality Assurance program which had implemented ASME NQA-1-1994, and the QARD, Revision 8, as required by the previous contract.
- DOE Order 414.1A was added per the contract.
- Additionally, the QAM clearly identifies which activities associated with the project are subject to the requirements of the QARD.

2. **SRD**

- The revision to the SRD is required to provide consistency between the QAM and the SRD criteria for quality assurance. These changes to the SRD remove the reliance on the ISMP as the implementing standard, by identifying the appropriate standard per the QAM.
- As defined in the QAM Requirements and Implementation Matrix, the SRD Implementing Code and Standards call-outs for the Quality Assurance elements of section 7.3, are being updated to reflect the contract requirements of NQA-1, DOE Order 414.1A, and the QARD.

3. **ISMP**

- The revision to the ISMP is required to provide consistency between the ISMP and the QAM descriptions of the quality assurance program. These changes to the ISMP reflect the QAM descriptions of quality assurance program elements that address contract requirements for conformance with NQA-1, DOE Order 414.1A, and the QARD.

C. List the affected sections of the changed AB document and any other affected AB document, and perform a comparison of the proposed AB change against those sections or documents.

1. **QAM**

- No comparison performed, instead a "first principles review" was performed and documented in the QAM Requirements and Implementation Matrix. (Attachment 2).

2. **SRD**

- Safety Requirements Documents Safety Criteria 7.3-1 through 7.3-9, 7.3-11, and 7.3.12.
See SRD Proposed Changes Summary/Safety Evaluation. (Attachment 4).

3. **ISMP**

- The ISMP Proposed Changes Summary/Safety Evaluation (Attachment 6) provides a summary of the affected sections of the ISMP, relative to maintaining consistency with the QAM. These specific QAM-related items are noted in the second column of the summary.
- Note that other editorial and correction changes to the ISMP, reflecting changes suggested by the DOE OSR in the DOE letter 01-OSR-0100, are also summarized in Attachment 6.



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ABCN No.¹: ABCN-24590-01-00001

Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

D. Perform a written evaluation (using the space following the questions below) that demonstrates that the revision to the AB²:

1. Will continue to comply with all applicable laws and regulations, conform to top-level safety standards, and provide adequate safety.

1. **QAM**

- The QAM was evaluated against applicable laws and regulations, The *QAM Requirements and Implementation Matrix* documents this evaluation. Based upon this evaluation, the QAM complies with applicable laws and regulations, conforms to top-level safety standards, and continues to provide adequate safety.

2. **SRD**

- The SRD safety criteria are not being modified or changed by this revision. The "laws and regulations" potentially affected by the changes to the SRD include *10 CFR 830.120*. The WTP remains fully compliant with this regulation.
- The top-level safety standard applicable to the changes to the SRD is *DOE/RL-96-0006*, sections 4.1.1.6 Human Aspects, 4.1.4.1 Safety/Quality Culture-Safety/Quality Culture, 4.1.6.1 Quality Assurance-Quality Assurance Application, 4.1.6.2 Quality Assurance-Established Techniques and Procedures, and 4.1.6.3 Operational Quality Assurance Programs.
- The SRD Implementing Code and Standards call-outs for the Quality Assurance Program elements of section 7.3 are being updated to reflect the contract requirements of *NQA-1*, *DOE Order 414.1A*, and the *QARD* and remain fully compliant to top-level safety standard *DOE/RL-96-0006*. (See Attachment 3).
- Utilizing the *QAM Requirements and Implementation Matrix*, the *SRD Proposed Changes Summary/Safety Evaluation* (Attachment 4) reflects a one-to-one comparison of the SRD, ISMP, Quality Assurance Program elements, and the contract requirements of *NQA-1*, *DOE Order 414.1A*, and the *QARD*.

3. **ISMP**

- ISMP descriptions of QA program commitments are being modified or changed by this revision. These items are noted in Attachment 6 for ISMP sections 3.3.1.5 and 3.3.3. The "laws and regulations" potentially affected by the changes to the ISMP include *10 CFR 830.120*. The RPP-WTP remains fully compliant with this regulation.
- The top-level safety standard applicable to the changes to the ISMP is *DOE/RL-96-0006*, sections 4.1.1.6 Human Aspects, 4.1.4.1 Safety/Quality Culture-Safety/Quality Culture, 4.1.6.1 Quality Assurance-Quality Assurance Application, 4.1.6.2 Quality Assurance-Established Techniques and Procedures, & 4.1.6.3 Operational Quality Assurance Programs.
- The ISMP description of the RPP-WTP Quality Assurance Program elements is impacted by the ISMP updates to reflect the QAM. The ISMP descriptions of the QA program are consistent with QAM elements to meet contract requirements of *NQA-1*, *DOE Order 414.1A*, and the *QARD*, and remain fully compliant to top-level safety standard *DOE/RL-96-0006*. Refer to *ISMP Proposed Changes Summary/Safety Evaluation* (Attachment 6, right-hand column) for a written evaluation of the impact of the ISMP proposed changes.

2. Will continue to conform to the original submittal requirements associated with the authorization basis document(s) affected by the revision.

1. **QAM**

- Contract DE-AC27-01RV14136 Standard 7, (3) Quality Assurance, (ii), (A) changed the original submittal requirement of *Quality Assurance Requirements and Description Document (QARD)* from Revision 8 to Revision 10.
- Contract DE-AC27-01RV14136 Standard 7, (3) Quality Assurance, (ii), (B) changed the original submittal requirement of the national consensus standard *ASME NQA-1-1994, Quality Assurance Program Requirements for Nuclear Facilities* to *ASME NQA-1-1989, Quality Assurance Program Requirements for Nuclear Facilities*.
- Contract DE-AC27-01RV14136 Standard 7, (3) Quality Assurance, (iv) requires that QA for facilities, projects,



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Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

2. Will continue to conform to the original submittal requirements associated with the authorization basis document(s) affected by the revision.

and secondary wastes not subject to the above requirements shall be done in accordance with *DOE Order 414.1A (9-29-99)*.

- The QAM was evaluated to these contract changes. The result of this evaluation is that the QAM conforms to the revised contract requirements.

2. **SRD**

- The SRD safety criteria is not being modified or changed by this revision, hence this revision will continue to conform to the original submittal requirements associated with the authorization basis documents(s) affected by the revision.

3. **ISMP**

- The ISMP descriptions of QA program commitments are being modified or changed by this revision, hence this revision does not continue to conform to the original submittal requirements associated with the authorization basis documents(s) affected by the revision.
- In general, these changes represent clarification items to ensure that the ISMP remains consistent with the QAM, which in turn is consistent with the intent of conformance with previous QA Program document requirements.

3. Will not result in inconsistencies with other commitments and descriptions contained in the authorization basis or an authorization agreement.

1. **QAM**

- An Authorization Basis evaluation was performed to ensure that implementation of the QAM and the resulting changes to the SRD and ISMP do not result in inconsistencies with other commitments and descriptions contained in the authorization basis or authorization agreement. The result of this evaluation was that the changes are consistent with other commitments and descriptions contained in other authorization basis or authorization agreement documents (e.g., RPP).

2. **SRD**

- The SRD safety criteria are not being modified or changed by this revision.
- Utilizing the *QAM Requirements and Implementation Matrix*, the *SRD Proposed Changes Summary/Safety Evaluation* (Attachment 4) reflects a one-to-one comparison of the SRD, ISMP, Quality Assurance Program elements, and the contract requirements of *NQA-1*, *DOE Order 414.1A*, and the *QARD*, showing that this revision will not result in inconsistencies.

3. **ISMP**

- Programmatic commitments, including QA program functional requirements and Project Management roles, responsibilities, authorities were reviewed and confirmed to be consistent between the ISMP and the QAM.
- The ISMP descriptions of two (2) QA program commitments are being modified or changed by this revision. One in ISMP section 3.3.1.5, and one in ISMP section 3.3.3.
- A change to ISMP section 3.3.1.5 was made to delete the statement to meet the intent of *DOE G 830.120*, the guide for implementation of 10 CFR 830.120. The intent of the QA Program is to use contractual requirements and the SRD implementing standards to meet 10 CFR 830.120.
- A revision of ISMP section 3.3.3 requirements for AB maintenance of the QAM, in order to be consistent with the QAM description of QAM maintenance were changed to match QAM Policy Q-02.1, section 1.5.

The current ISMP section 3.3.3 states that all changes to the QA Program are to be submitted for DOE review and approval. The QAM states submittal of only QAM changes reflecting reductions in commitment to the QA program are submitted. The change to have ISMP section 3.3.3 agree with the QAM needs to be agreed to by



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ABCN No.¹: ABCN-24590-01-00001

Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

3. Will not result in inconsistencies with other commitments and descriptions contained in the authorization basis or an authorization agreement.

DOE.

Additionally, to match the QAM Policy Q-02.1, section 1.5, a change to the QAM maintenance section in the ISMP, section 3.3.3 to allow a 90 day QAM change review and approval period by DOE, as opposed to a 30 day period needs to be agreed to by DOE.

- E. Describe the implementation schedule for the proposed change. Include reference to all affected documents (AB and otherwise) to ensure an accurate representation of the schedule.

Following approval of the QAM, and the subsequent changes to the SRD and the ISMP, the implementation schedule is:

1. **QAM** – Will be issued within 30 days of DOE approval of the QAM.

Applicable project procedures referenced in the *QAM Requirements and Implementation Matrix* will be revised within 90 days of DOE approval of the QAM.

2. **SRD** – Within 30 days of DOE approval of the change.

3. **ISMP** - Within 30 days of DOE approval of the change.

- F. Answer the following questions to determine if the proposed revision to the AB requires prior approval by DOE.

1. Does the revision involve the deletion or modification of a standard previously identified or established in the approved SRD? ☒ Yes ☐ No

Explain:

1. **QAM** - See section D2 above, for an explanation of modification to standards previously identified or established in the approved SRD.
2. **SRD** - This change impacts the citation of implementing standards for the Quality Assurance Program, section 7.3 of the SRD. As discussed above, the change will replace SRD safety criteria implementing standard citation of ISMP sections related to the Quality Assurance Program. This change is a non-intent change (i.e., there was no intent to change requirements) in that the Quality Assurance Program requirements identified in the SRD and ISMP will be changed to reference the codes and standards defined in the QAM.
3. **ISMP** - See SRD input.

2. Does the revision result in a reduction in commitment currently described in the AB? ☒ Yes ☐ No

Explain:

Note: Only the ISMP changes as described below result in a reduction in commitment

1. **QAM** - Implementation of the QAM and the subsequent changes to the SRD will not result in a reduction in commitment currently described in the Authorization Basis.
2. **SRD** - A comparison review of the quality assurance requirements contained within the SRD against the QAM was completed. (See Attachment 4). The review showed that applicable portions of the SRD Quality Assurance Program have been included in the newly identified implementing codes and standards.
3. **ISMP** - A comparison review of the quality assurance program requirements contained within the ISMP against the QAM concluded the changes to ISMP sections 3.3.1.5 and 3.3.3 are the only changes that reflect a reduction in commitment. See Attachment 6 for discussion of these reductions.

3. Does the revision result in a reduction in the effectiveness of any procedure, program, plan, or management process described in the AB? ☐ Yes ☒ No



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ABCN No.¹: ABCN-24590-01-00001

Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

Explain:

1. **QAM** - Implementation of the QAM and the subsequent changes to the SRD and ISMP will not result in a reduction in the effectiveness of any procedure, program, plan, or management process described in the Authorization Basis.
2. **SRD** - As discussed in F.2. above, the change is a non-intent change, as no quality assurance program requirements were modified or deleted. Based on reviews performed, it is concluded that the revision does not result in a reduction in the effectiveness of any procedure, program, plan, or management process described in the AB.
3. **ISMP** - As discussed in F.2 above, the ISMP change is a non-intent change, as no QA Program requirements were modified or deleted. The ISMP changes of QA Program descriptions were assessed as maintaining QA Program effectiveness. It is concluded that the revision does not result in a reduction in the effectiveness of any procedure, program, plan, or management process described in the AB.

If all the answers to questions F1-F3 are no, then the AB change can be made without prior DOE approval. If the answer to question F1 is yes, then follow the directions in item G. If the answer to question F2 or F3 is yes, then follow the directions in item H.

- G. If the revision involves the deletion or modification of a standard previously identified in the approved SRD, provide in the space below a certification that the revised SRD identifies a set of standards that continues to provide adequate safety, comply with all applicable laws and regulations, and conform to top-level safety standards.

As described in section D2 above, two standards were modified; the revision levels for the QARD was changed from revision 8 to revision 10 and NQA-7 was changed from the 1994 revision to the 1989 revision.

One standard was added, Attachment 1 to DOE Order 414.1A (9-29-99), Contractor Requirements Document.

One standard was deleted, NUREG-1293, as listed in ISMP section 3.3.1.5. This NRC standard was considered non-applicable to the non-privatized RPP-WTP.

The impact of these selected standards has been evaluated (See Attachment 8) using the "0004" process. The result of this evaluation found no adverse impact, and the SRD identifies a set of standards which continue to provide adequate safety, compliance with applicable laws and regulations, and conformance to top-level safety standards.

- H. If the revision results in a reduction in commitment or reduction in effectiveness currently described in the AB, justify in the space below the changes and demonstrate that the proposed change is safe. Consider a line-by-line comparison justification or, alternatively, a "first principles" justification (consult ES&H).

The changes continue to ensure adequate safety to the public and the worker. DOE/RL-96-0006, section 4.1.6 requires that measures in the design and operation of the facility necessary to protect the public and workers against accident conditions should be evaluated against acceptable guidelines to demonstrate that they perform their intended purpose with high confidence. This "first principles" evaluation is documented in the QAM Requirements and Implementation Matrix, (Attachment 2) and for the ISM "0004" process for selection of implementing standards (Attachment 8).

Obtain all signatures and process through PDC for issue and distribution. If prior DOE approval is required, prepare a formal cover letter and transmit, with attachments, to DOE. This cover letter/ABCN package constitutes a request to amend the Authorization Basis.

If a "decision to deviate" from the AB will be used while this ABCN is pending, the Preparer and the Reviewer must sign below before entering the deviation option (see K70P551 for details on deviating from the AB).



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ABCN No.¹: ABCN-24590-01-00001 Rev No.: 01

Proposed Change Title: Submittal of Quality Assurance Manual (QAM), QAM-24590-01-00001, Rev. AB

Initiating document (DRR, DCA, drawing, procedure, etc.): Contract No. DE-AC27-01RV14136, 01-OSR-0151

Affected AB document(s) and document number (SRD, ISMP, etc.): QAP (BNFL-5193-QAP-01), SRD (BNFL-5193-SRD-01-02), and ISMP (BNFL-5193-ISP-01)

Attachments:

1. Quality Assurance Manual, QAM-24590-01-00001, Rev. AB
2. QAM Requirements and Implementation Matrix, IM-24590-01-00001, Rev. AB
3. Conformance to Top-Level Standard DOE/RL-96-0006
4. SRD Proposed Changes Summary/Safety Evaluation
5. Redline Pages to the SRD, Rev. 4a, Preliminary
6. ISMP Proposed Changes Summary/Safety Evaluation
7. Redline Pages to the ISMP, Rev. 6a, Preliminary
8. Identification of Implementing Standards for RPP-WTP Project QA Program

Preparer ³ :	_____	Date:	_____
Reviewer ³ :	_____	Date:	_____
ES&H Manager:	_____	Date:	_____
QA Manager:	_____	Date:	_____
PSC Chair:	_____	Date:	_____
Project Manager:	_____	Date:	_____

If a Decision to Deviate (DTD) from the AB has been initiated, enter the DTD and Deficiency Report numbers here:

³ The Preparer and Reviewer must have completed Authorization Basis maintenance training.